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Group Art Unit: 2826 Examiner: Johannes P. Mondt

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A nitride based semiconductor light emitting device comprising:

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a light emitting layer composed of a Group III nitride based semiconductor and including an active layer; and

a cladding layer of a first conduction type composed of a Group III nitride based semiconductor, formed on said light emitting layer, having a larger band gap than said active layer, and having a lower refractive index than the active layer,

the thickness of said cladding layer of a first conduction type being less than $0.3~\mu m$, and said cladding layer of a first conduction type has an aluminum composition ratio of not more than 0.05.

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14. (Amended) A nitride based semiconductor light emitting device-comprising:

a light emitting layer composed of a Group III nitride based semiconductor; and an electrode which is brought into contact with said light emitting layer, wherein said light emitting layer includes an active layer and an optical guide layer of a first conduction type formed on said active layer,

said optical guide layer of a first conduction type has a larger band gap than that of said active layer and has a lower refractive index than that of said active layer, and said electrode is brought into ohmic contact with said optical guide layer.

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Please add the following new claims:

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25. (New) A nitride based semiconductor laser device comprising:

a light emitting layer composed of a Group III nitride based semiconductor and including an active layer; and

a cladding layer of a first conduction type composed of a Group III nitride based semiconductor, formed on said light emitting layer, having a larger band gap than said active layer, and having a lower refractive index than the active layer,

the thickness of said cladding layer of a first conduction type being less than 0.3 μm.

- 26. (New) The nitride based semiconductor laser device according to claim 25, wherein said cladding layer of a first conduction type has an aluminum composition ratio of not more than 0.05.
- 27. (New) The nitride based semiconductor laser device according to claim 25, wherein

said light emitting layer further includes an optical guide layer of a first-conduction-typeformed on said active layer,

said optical guide layer of a first conduction type has a smaller band gap and a higher refractive index than said cladding layer of a first conduction type and has a larger band gap and a lower refractive index than said active layer, and

said cladding layer of a first conduction type is formed on said optical guide layer of a first conduction type.

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28. (New) The nitride based semiconductor laser device according to claim 27, wherein said light emitting layer further includes a carrier leakage preventing layer of a first conduction type formed on said active layer and having a larger band gap than said optical guide layer of a first conduction type, and

said optical guide layer of a first conduction type is formed on said carrier leakage preventing layer of a first conduction type.

- 29. (New) The nitride based semiconductor laser device according to claim 25, wherein said cladding layer of a first conduction type has a ridge portion, and the thickness of said ridged portion is less than 0.3 µm.
- 30. (New) The nitride based semiconductor laser device according to claim 25, wherein said Group III nitride based semiconductor contain at least one of boron, gallium, aluminum, indium, and thallium.
- 31. (New) The nitride based semiconductor laser device according to claim 25, wherein said cladding layer of a first conduction type contains gallium and aluminum.
- 32. (New) The nitride based semiconductor laser device according to claim 25, wherein said active layer contains gallium and indium.

a4 cont. 33. (New) The nitride based semiconductor laser device according to claim 25, wherein said active layer has a multi-quantum well structure alternately including one or more well layers and a plurality of quantum barrier layers, and

the band gap of the active layer is the band gap of said one or more well layers.

34. (New) The nitride based semiconductor laser device according to claim 25, wherein the electric field distribution of laser light in the active layer is changed in accordance with a sine function or a cosine function, and

the electric field distribution of laser light in the cladding layer of a first conduction type is changed in accordance with an exponential function.

- 35. (New) The nitride based semiconductor laser device according to claim 25, further comprising a current blocking layer formed on or in said cladding layer of a first conduction type and having a striped opening.
- 36. (New) The nitride based semiconductor laser device according to claim 25, wherein said first conduction type is a p type.
- 37. (New) The nitride based semiconductor laser device according to claim 25, further comprising a cladding layer of a second conduction type composed of a Group III nitride based semiconductor,

said light emitting layer is formed on said cladding layer of a second conduction type.